

## **REMARKS**

Claims 1, 10, 13, 29-31, and 36-46 are pending in the case, claims 2-9, 11-12, 14-28, and 32-35 having previously been canceled and claims 36-46 having previously been added. The Office Action rejected the claims as follows:

- claims 38-41 under 35 U.S.C. §112, ¶1 as failing to comply with the written description requirement;
- claim 10 under 35 U.S.C. §112, ¶2 as indefinite for the recitation of “the audio profile” without antecedent basis;
- claims 29 and 30 as anticipated under 35 U.S.C. §102(e) by U.S. Letters Patent 6,944,474 (“Rader, *et al.*”);
- claims 29-30, 37 and 42-45 as anticipated under 35 U.S.C. §102(e) by U.S. Letters Patent 7,110,951 (“Lemelson, *et al.*”);
- claims 1, 13, 29-30, and 38-39 as obvious under 35 U.S.C. §103(a) over Rader, *et al.* and U.S. Patent Publication 2006/102255 (“Lewis”);
- claims 1, 10, 13, 36, and 38-39 as obvious under 35 U.S.C. §103(a) over Lemelson *et al.*;
- claims 31 and 40 as obvious under 35 U.S.C. §103(a) over Lemelson *et al.* in view of U.S. Letters Patent 3,808,354 (“Feezor”);
- claim 41 as obvious under 35 U.S.C. §103(a) over Lemelson *et al.* in view of Feezor and in further view of U.S. Patent 5,550,923 (“Horvet”); and
- claim 46 as obvious under 35 U.S.C. §103(a) over Lemelson *et al.* in view of Rader *et al.*

Applicants continue to traverse each of the rejections in this case.

### **I. CLAIMS 38-41 COMPLY WITH THE WRITTEN DESCRIPTION REQUIREMENT**

#### **A. The Office’s Analysis Rests on a Number of Errors**

The Office rejected claims 38-41 under 35 U.S.C. §112, ¶1 as failing to comply with the written description requirement. The Office notes that claim 38 recites “a device profile and at least one audio profile”, and posits:

On p. 14, lines 9-16, it is clearly stated that the audio profile includes a user profile and a device profile. On p. 16, lines 14-22, the audio profile is also defined including a device profile and a user profile. Based on these disclosures, one skilled in the art would have expected the device profile is a part of the audio profile. The amended claims imply that they are separate units. The current invention as disclosed cannot have audio profile and device profile as two independent units simultaneously.

(Office Action dated July 15, 2008, “Detailed Action”, p. 2, ¶1) This reasoning errs in several respects.

The **first error** lies in the assertion that the subject limitation implies that a device profile and an audio profile *are* different things—*i.e.*, that “[t]he amended claims imply that they are separate units.” Upon the plain meaning of the language, the amended claims imply that a device profile and an audio profile *may* be different things. This is very different from the Office’s assertion that language implies that they *necessarily are* different things. The language employed does not exclude the illustrated embodiment in which the device profile is a part of the audio profile.

The **second error** lies in the Office’s misconstruction Applicants’ disclosure. The Office cites two passages from the application as filed, the first of which reads:

The system 200, in one embodiment, may have a plurality of users. In the illustrated embodiment, the plurality of users may each have an associated audio profile 225 stored in a database 230, which may be located at any desired location, including on the processor-based device 120 or another device. For example, the database 230 may be stored in a location remote to the processor-based device 120. *In one embodiment, the audio profile 225 includes a user profile and a device profile.* The user and device profiles may, in various alternative embodiments, be stored in any desirable location. In particular, the user and device profiles may be stored in different locations and/or different databases.

(Applicants’ specification as filed, p. 14, lines 9-16, emphasis added) Note the qualification “[i]n one embodiment” opening the emphasized sentence. This clearly implies that it may be different in other embodiments. The second passage reads:

*Although the embodiment of the audio profile 225 shown in Figure 2 includes information associated with both the user and the audio presentation device 205, the present invention is not so limited. In alternative embodiments, portions of the audio profile 225 corresponding to the user's preferences and/or capabilities,*

*i.e. a user profile, and the characteristics and/or capabilities of the audio presentation device 205, i.e. a device profile, **may be separate entities**.* For example, the audio profile database 230 may include one set of entries associated with the portion of the audio profile 225 corresponding to the user's preferences and/or capabilities, and a second set of entries corresponding to the portion of the audio profile 225 associated with the characteristics and/or capabilities of the audio presentation device 205.

(Applicants' specification as filed, p. 14, lines 9-16, emphasis added) Nothing in this passage limits the device profile to a part of an audio profile. Indeed, whole point of the paragraph, as is reflected in the opening sentence, is to relate that other embodiments might structure all these entities differently. The passage even expressly states that the device profile may be stored as a "separate entity" from the rest of the audio profile.

The **third error** is the conclusion drawn from the misconstruction—namely, that "[b]ased on these disclosures, one skilled in the art would have expected the device profile is a part of the audio profile." This would only be true if those skilled in the art construed the claims as limited to the illustrated embodiment in a manner contrary to law. *Cf. C.R. Bard, Inc. v. United States Surgical Corp.*, 388 F.3d 858, 865 (Fed. Cir. 2004) ("A construction that excludes a preferred embodiment is rarely, if ever correct.") (citations omitted). Indeed, the Office's conclusion is refuted by the very passages from Applicants' disclosure on which it relies. As noted above, the first passage in which the device profile is a part of the audio profile is expressly qualified as the disclosure of the single, illustrated embodiment. Furthermore, the second passage expressly states that alternative embodiments may structure these elements differently. The second passage even conclusively refutes the Office's position because it affirmatively states that the device profile may be a "separate entity" relative to the rest of the audio profile.

The **fourth error** lies in the penultimate conclusion that "[t]he current invention as disclosed cannot have audio profile and device profile as two independent units simultaneously." This conclusion is predicated on the earlier error that the claim language necessarily implies that the audio profiles and device profiles are different things. It is also predicated on either the error that the claim language is limited to the illustrated embodiment or the misconstruction of Applicants' disclosure.

**B. The Subject Limitation complies with the Written Description Requirement**

The Office formulates the ultimate inquiry with respect to the written description requirement as follows:

The courts have described the essential question to be addressed in a description requirement issue in a variety of ways. An objective standard for determining compliance with the written description requirement is, "does the description clearly allow persons of ordinary skill in the art to recognize that he or she invented what is claimed." ...to satisfy the written description requirement, an applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention, and that the invention, in that context, is whatever is now claimed. The test for sufficiency of support in a parent application is whether the disclosure of the application relied upon "reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter."

M.P.E.P. §2163.02 (citations omitted).

Applicants' disclosure firmly establishes that Applicants had possession of at least the illustrated embodiment. In the illustrated embodiment, the audio profile includes the device profile. Thus, when one receives data associated with a device profile it necessarily also receives data associated at least one audio profile. That is, it "receiv[es] data associated with a device profile and at least one audio profile". The illustrated embodiment therefore amply demonstrates that the disclosure "clearly allow[s] persons of ordinary skill in the art to recognize that he or she invented what is claimed." Furthermore, Applicants' disclosure also clearly describes at p. 14, lines 9-16 how the device profile and the other parts of the audio profile "may be separate entities" in alternative embodiments. Applicants' disclosure therefore also establishes that Applicants were in possession of embodiments where the device profile is a "separate entity" from the rest of the audio profile.

Applicants therefore respectfully submit that the subject limitation complies with the written description requirement and that the rejection is improvident. Ultimately, the Office's position is that the limitation requires the audio profile and the device profile be separate entities and that this is not disclosed. Both these propositions are incorrect. The specification clearly discloses that in some embodiments the audio profile and the device profile may be "separate entities". Accordingly, Applicants request that the rejection be withdrawn.

## II. CLAIM 10 IS DEFINITE AS AMENDED

The Office rejected claim 10 35 U.S.C. §112, ¶2 as indefinite for the recitation of “the audio profile” without antecedent basis”. Applicants have amended claim 10 to moot this rejection. Applicants accordingly request that rejection be withdrawn.

## III. CLAIMS 29-30, 37 & 42-45 ARE NOVEL OVER LEMELSON, *ET AL.*

The Office rejected claims 29-30, 37 and 42-45 as anticipated under 35 U.S.C. §102(e) by U.S. Letters Patent 7,110,951 (“Lemelson, et al.”). An anticipating reference, by definition, must disclose every limitation of the rejected claim in the same relationship to one another as set forth in the claim. M.P.E.P. § 2131; *In re Bond*, 15 U.S.P.Q.2d (BNA) 1566, 1567 (Fed. Cir. 1990). Each of the independent claims recites a limitation not taught or suggested by Lemelson *et al.* More particularly, each independent claim 29 and 42 recites “receiving data indicative of a detected acoustic test signal” and “a device profile”. Lemelson *et al.* therefore does not anticipate the claims. M.P.E.P. § 2131; *In re Bond*, 15 U.S.P.Q.2d (BNA) 1566, 1567 (Fed. Cir. 1990).

Lemelson *et al.* teaches nothing regarding “detection” for the same reasons that Rader *et al.* does not—namely, because they are different things. Claims 29-30 and 37 recite or incorporate a “computer program product.” Inanimate objects do not “hear.” Furthermore, there is no reason to construe the term differently in claims 42-45 than in claims 29-30. The Office’s position expressly admits that it is the user that “hears” the acoustic signal, and not a computing apparatus executing a program. The Office therefore is apparently confusing an apparatus for a person.

Applicants also previously pointed out that Lemelson *et al.* fails to teach a device profile such as is recited in claim 42 and other claims. The Office responded:

On p. 11, applicant [*sic*] argued that Lemelson fails to show a device profile. This is not persuasive. First of all, the amended claim 42 introduced new matter and is being rejected under 112, 1st paragraph above. Secondly claim 42 states that “receiving data associated with an audio profile and a device profile” [*sic*] Both applicant [*sic*] and examiner [*sic*] agreed that elements 28, 30 and 32 are part of device [*sic*] profile, so any data from any of 28, 30, and 32 reads on the data associate with a profile device.

“Detailed Action”, p. 8, ¶10. First of all, the new matter rejection is not relevant to the present dispute and is now moot. Second of all, as Applicant earlier pointed out:

While these modules 28, 30, and 32 might be part of a device profile, they do not themselves provide data regarding a device profile. They instead provide data that can be displayed to a hearing impaired user (col. 11, lines 26-36) and to correct errors produced by the speech recognition and lip reading modules (col. 11, lines 37-51), respectively.

Response to Office Action dated June 19, 2007, p. 11. The Office’s construction is therefore repudiated on the face of the reference—Lemelson *et al.* establishes quite to the contrary of what the Office asserts.

Lemelson *et al.*, when properly construed, therefore does not teach detection or a device profile as is recited or incorporated in each of claims 29-30, 38-39 and 42-45. Lemelson *et al.* therefore fails to anticipate any of these claims because it fails to teach all the limitations thereof. M.P.E.P. § 2131; *In re Bond*, 15 U.S.P.Q.2d (BNA) 1566, 1567 (Fed. Cir. 1990).

#### **IV. CLAIMS 29-30 ARE NOVEL OVER RADER ET AL.**

The Office Action rejected claims 29 and 30 as anticipated under 35 U.S.C. §102(e) by U.S. Letters Patent 6,944,474 (“Rader, *et al.*”). An anticipating reference, by definition, must disclose every limitation of the rejected claim in the same relationship to one another as set forth in the claim. M.P.E.P. § 2131; *In re Bond*, 15 U.S.P.Q.2d (BNA) 1566, 1567 (Fed. Cir. 1990). Rader *et al.* fails to meet this standard with respect to the original claims as amended and the new claims.

Claims 29 recites “receiving data indicative of a detected acoustic test signal”. Dependent claim 30 incorporates this limitation from the independent claims from which they depend. 35 U.S.C. §112, ¶4. Applicants respectfully submit that Rader *et al.* does not teach this limitation. In col. 3, at lines 10-14, Rader *et al.* teaches a signal used to test the hearing of a user. Such a signal is “heard” by the user, not “detected” by an apparatus. It is clear from Applicants’ disclosure that the “acoustic test signal” is detected by an electro-mechanical transducer and is not used in a hearing test. This distinction is important, since claim 29 is directed to a computer program product and its functionality. The signal heard by the user of Rader *et al.* cannot be

transmitted electrically in the manner required to meet the limitations of the claim. Thus, Rader et al. does not teach a “detected acoustic test signal.”

Accordingly, Rader et al. fails to disclose every limitation of the rejected claim in the same relationship to one another as set forth in the claims. Rader et al. therefore does not anticipate any of claims 29 and 30. M.P.E.P. § 2131; *In re Bond*, 15 U.S.P.Q.2d (BNA) 1566, 1567 (Fed. Cir. 1990). Wherefore, Applicants respectfully submit that the rejections be withdrawn.

## **V. CLAIMS 1, 13, 29-30, & 38-39 ARE UNOBVIOUS OVER RADER ET AL. & LEWIS**

The Office rejected claims 1, 13, 29-30, and 38-39 as obvious under 35 U.S.C. §103(a) over Rader, *et al.* and U.S. Letters Patent Publication 2006/102255 (“Lewis”). To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. M.P.E.P. § 706.02(j); *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). Rader et al. and Lewis fail to meet this standard.

Claims 1 and 13 both recite “a device profile” and “determining acoustic data to be provided”, or a variation thereon, based in part on the device profile. Lewis is cited only for teaching that authentication can be performed using PINs. The Office relies on Rader et al. to teach these limitations, but is mistaken.

The Office cites element 920 of Fig. 10, element 101 in Fig. 1, and col. 8, lines 2-4 as teaching “a device profile”. Element 101 in Fig. 1 is labeled, “Personal Preference User Choice”, which does not intuitively indicate anything about the device, but rather is more akin to a user profile. Its only mention in the specification in col. 4, at lines 7-25 does nothing to contradict this assessment. Element 920 of Fig. 10 is an indication of the volume knob on the device. However, the specification indicates that this information is not used to profile the device, but rather as a proxy for environmental conditions:

*FIG. 10 illustrates an approach for indirectly determining environment noise, by position of a volume control switch, for use in compensation for environmentally induced hearing loss profile. Thus, in a mobile phone or other personal communication device, volume control knob position information 920 is applied to volume control knob position-to-compression coefficient mapping module 921. The coefficient mapping is supplied to a compression*

algorithm 922. An incoming speech signal 923 is applied to the compression algorithm 922. A modified speech signal 924 results which is applied to an output transducer 925, such as a speaker. Of course "volume control knob position information" refers to any information which indicates the level of a volume input switch, such as a knob, a slider, or an up/down switch pair, which is adjusted by a user of the personal communication device to set a volume level for audio output of the device.

(col. 14, line 64 to col. 15, line 13, emphasis added) Col. 8, lines 2-4 merely state that information about the phones operation can be provided with the phone and downloaded to it from a server.

Rader et al. therefore does not teach "a device profile". However, even if it does, it does not teach using the alleged "device profile" in "determining acoustic data to be provided". As noted above, in Fig. 1, there is no mention of a device profile. The information downloaded to the phone in col. 8, lines 2-4 is not acoustic data. And, in Fig. 10, the acoustic data is already provided at the time the volume knob position is considered. That is, the volume knob position is considered in formulating the presentation of already received acoustic data rather than in deciding what acoustic information is to be provided. Rader et al. and Lewis in combination therefore do not render obvious any of claims 1 and 13.

As was earlier established in this prosecution, claims 29 recites "receiving data indicative of a detected acoustic test signal", which is not found in either Rader et al. It also is not found in Lewis. Indeed, there is no allegation that Lewis teaches such a thing. Claim 38 also recites this limitation, and claims 30 and 39 incorporate this limitation by virtue of its dependence from claim 38. Accordingly, Rader, et al. and Lewis in combination fail to render obvious claims 29-30 and 38-39.

## **VI. ALL OF THE REMAINING CLAIMS ARE ALLOWABLE OVER THE ART OF RECORD**

The "final" Office Action iterated a number of obviousness rejections, including:

- claims 1, 10, 13, 36, and 38-39 as obvious under 35 U.S.C. §103(a) over Lemelson *et al.*;
- claims 31 and 40 as obvious under 35 U.S.C. §103(a) over Lemelson *et al.* in view of U.S. Letters Patent 3,808,354 ("Feezor");



- claim 41 as obvious under 35 U.S.C. §103(a) over Lemelson *et al.* in view of Feezor and in further view of U.S. Patent 5,550,923 (“Horvet”); and
- claim 46 as obvious under 35 U.S.C. §103(a) over Lemelson *et al.* in view of Rader.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. M.P.E.P. § 706.02(j); *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974).

As previously established in this prosecution, Lemelson *et al.* fails to teach or suggest “a device profile”. Independent claims 1, 13, and 38 expressly recite this limitation and the remaining claims incorporate this limitation from their dependence from one of these claims. 35 U.S.C. §112, ¶4. The Office does not directly allege that Lemelson *et al.* discloses this limitation, noting only in passing that Lemelson *et al.* teaches that “[t]he device profile could be updated by placing the remote control at different locations (col. 13, lines 40-60).” But this passage teaches only a way to calibrate audio output of the television:

A commonly used technique for equalizing sound levels for a particular listening location 62 is through the use of feedback as seen in FIG. 5. A test signal (normally pink noise) is applied to one speaker 10 at a time, and this signal is input through a microphone to the equalizing electronics 68. The equalizing electronics calculate the sound level power spectrum at the listener's location. With information from the spectral analysis, individual frequency bands can be adjusted until a flat response is attained. For multiple listeners 62 and 64 the adjustment is made to give the best overall response for the listeners. Some compromise must be made because all locations cannot be adjusted for perfect response for all the frequencies of interest. This feature of the present invention is useful for people with normal hearing in addition to the hearing impaired. This procedure is sometimes performed today by skilled audio technicians using a tone generator and real time analyzer (RTA), but some high end home stereo equipment today has the capability of automatically equalizing for the room acoustics. An example of this type of home stereo hardware is the Theater Master series from Enlightened Audio Designs.

An objective reading of this passage produces no teaching or suggestion of a “device profile.” Since Lemelson *et al.* fails to teach this limitation, and since the secondary references do not remedy this deficiency, the art of record fails to teach or suggest all the limitations of the claims.

Accordingly, none of claims are obvious over the art of record. M.P.E.P. § 706.02(j); *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974).

**X. CONCLUDING REMARKS**

Applicants therefore respectfully submit that the claims are in condition for allowance, and requests that the rejections be withdrawn and the claims be allowed to issue. The Examiner is invited to contact the undersigned attorney at (713) 934-4053 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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